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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
SMITH, FANGEMONIQUE A	

ART UNIT	PAPER NUMBER
3736	

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/642,406	QUICK ET AL.	
	Examiner	Art Unit	
	Fangemonique Smith	3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45,51-59,63-65,69 and 71-95* is/are pending in the application.

4a) Of the above claim(s) *46-50,66-68 and 70* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45,51-59,63-65,69 and 71-95* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/17/04, 6/2/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *IDS: 7/21/05, 10/21/05, 3/3/06*.

DETAILED ACTION

Election/Restrictions

1. Claims 46-50, 66-68 and 70 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 23, 2006.

Claim Objections

2. Claims 1, 2, 5 and 24 objected to because of the following informalities:

a. At line 15 of claim 1, it is suggested to modify "elongated member" to read --elongated probe member-- to maintain consistency within the claim language.

b. At line 1 of claim 2, it is suggested to replace "probe member" with --elongated probe member-- to maintain consistency claim terminology.

c. At line 1 of claim 5, it is suggested to change "wherein aperture" to read --wherein the aperture--.

d. At line 2 of claim 24, it is suggested to replace the word "a" with the word --an--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2-6, 8-16, 22-45, 52-65, 69, 71-84 and 86-95 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 2 recites the limitation "the open section of the outer cannula" in lines 6 and 7. There is no prior mention of an open section of an outer cannula in claim 2 or in any claim from which claim 2 depends. Therefore, there is insufficient antecedent basis for this limitation in the claim. Upon rejection of claim 2, any claim depending from claim 2 is also rejected.

6. Claim 4 recites the limitation "the arc length of the aperture" in lines 2 and 3. There is no prior mention of an arc length of an aperture in claim 4 or in any claim from which claim 4 depends. Therefore, there is insufficient antecedent basis for this limitation in the claim. Upon rejection of claim 4, any claim depending from claim 4 is also rejected.

7. Claim 6 recites the limitation "the aperture of the tissue accessing cannula" in line 2. There is no prior mention of an aperture of the tissue accessing cannula disclosed in claim 6 or in any claim from which claim 6 depends. Therefore claim 6 lacks sufficient antecedent basis for this limitation.

8. Claim 7 recites the limitation "the inner lumen" in lines 1, 3 and 4. It is unclear if the inner lumen referenced in this claim refers to the inner lumen of the elongated probe member disclosed in claim 1 or if the limitation intends to refer to the inner lumen of the rotatable tissue accessing cannula, rendering the claim indefinite.

9. Claims 8 and 15 recite the limitation "a longitudinal axis" in line 2. It is unclear if the longitudinal axis referenced in this claim refers to the same longitudinal axis disclosed in claim 1

or if the limitation intends to introduce a new longitudinal axis, rendering the claim indefinite. Upon rejection of claims 8 and 15, any claims depending from claims 8 and 15 are also rejected.

10. Claim 13 recites the limitation "the cutting edge" in line 2. It is unclear if the cutting edge referenced in this claim refers to the previously recited distal cutting edge or proximal cutting edge, rendering the claim indefinite. Upon rejection of claim 13, any claim depending from claim 13 is also rejected.

11. Claim 14 recites the limitation "the cutting and non-cutting edges" in lines 1 and 2. It is unclear if the limitation refers to the distal cutting edge, proximal cutting edge or both. Further, it is unclear if there are more than one non-cutting edges being referenced by this limitation, rendering the claim indefinite.

12. Claims 17-19 and 21 recite the limitation "the aperture" in lines 1 and 3, respectively. It is unclear if this limitation in either claim refers to the aperture of the elongated probe member or if the limitation refers to the aperture of the tissue accessing cannula, rendering the claim indefinite. Upon rejection of claims 17-19 and 21, any claims depending from claims 17-19 and 21 are also rejected.

13. Claims 18 and 19 recite the limitation "the tissue cutting edge" in lines 1-3. It is unclear if the limitation refers to the distal cutting edge or the proximal cutting edge. Further, it is unclear if there are more than one non-cutting edges being referenced by this limitation, rendering the claim indefinite.

14. At line 3 of claims 18 and 19, the pronoun "its" is used. However, one cannot be certain to what the pronoun is intended to refer. Hence, the claim is rendered unclear and indefinite.

15. Claim 22 recites the limitation "the tissue receiving cannula" in line 17. There is no prior mention of a tissue receiving cannula in claim 22. Therefore, there is insufficient antecedent basis for this limitation in the claim. Upon rejection of claim 22, any claim depending from claim 22 is also rejected.

16. Claim 22 recites the limitation "a drive unit" in line 24. It is unclear if the drive unit referenced in this claim refers to the drive unit previously disclosed in the claim or if the limitation intends to introduce a new drive unit, rendering the claim indefinite. Upon rejection of claim 22, any claim depending from claim 22 is also rejected.

17. Claims 25, 30 and 34 recite the limitation "the arcuate wall section" in lines 1 and 2. There is no prior mention of an arcuate wall section disclosed in claims 25, 30 or 34 or in any claim from which claims 25, 30 and 34 depend. Therefore, there is insufficient antecedent basis for this limitation in the claims

18. Claim 25 recites the limitation "the arc length of the tissue receiving aperture" in lines 2 and 3. There is no prior mention of an arc length of a tissue-receiving aperture in claim 25 or in any claim from which claim 25 depends. Therefore, there is insufficient antecedent basis for this limitation in the claim.

19. Claim 30 recites the limitation "the aperture in the outer member" in lines 2 and 3. There is no prior mention of an aperture in the outer member in claim 30 or in any claim from which claim 30 depends. Therefore, there is insufficient antecedent basis for this limitation in the claim.

20. Claim 34 recites the limitation "both edges" in lines 2 and 3. This limitation references two edges, however only a tissue cutting edge was disclosed. It is unclear if the limitation

referenced in this claim refers solely to the tissue cutting edge previously disclosed in the claim or if the limitation intends to introduce a new edge, rendering the claim indefinite.

21. Claim 35 recites the limitation "a tissue cutting edge" in lines 2 and 3. It is unclear if the tissue cutting edge referenced in this claim refers to the tissue cutting edge previously disclosed or if the limitation intends to introduce a new tissue cutting edge, rendering the claim indefinite. Upon rejection of claim 35, any claim depending from claim 35 is also rejected.

22. Claim 40 recites the limitation "the tissue cutting surface" in line 19. There is no prior mention of a tissue cutting surface in claim 40. Therefore, there is insufficient antecedent basis for this limitation in the claim. Upon rejection of claim 40, any claim depending from claim 40 is also rejected.

23. Claim 40 recites the limitation "a drive unit" in line 20. It is unclear if the drive unit referenced in this claim refers to the drive unit previously disclosed in the claim or if the limitation intends to introduce a new drive unit, rendering the claim indefinite. Upon rejection of claim 40, any claim depending from claim 40 is also rejected.

24. Claim 45 recites the limitation "the biopsy device" in line 1. Prior mention of a biopsy device merely discloses an intended use of the probe disclosed and does not positively claim a biopsy device. Therefore, there is insufficient antecedent basis for this limitation in the claim.

25. Claim 52 recites the limitation "one longitudinally oriented, tissue cutting edges" in lines 6 and 7. It is unclear whether the limitation intends to disclose one edge or a plurality of edges, rendering the claim indefinite. Upon rejection of claim 52, any claim depending from claim 52 is also rejected.

26. Claim 52 recites the limitation "a tissue cutting edge" in line 10. It is unclear if the tissue cutting edge referenced in this claim refers to one of the tissue cutting edges previously disclosed in the claim or if the limitation intends to introduce a new tissue cutting edge, rendering the claim indefinite. Upon rejection of claim 52, any claim depending from claim 52 is also rejected.

27. Claim 52 recites the limitation "the at least one cutting edge" in line 12. Prior to this recitation there has been mention of a cutting edge as well as a plurality of cutting edges. One is unable discern to which edge the limitation refers, rendering the claim vague and indefinite. Upon rejection of claim 52, any claim depending from claim 52 is also rejected.

28. Claims 52 and 71 both recite the limitation "the open tissue receiving section" in lines 14-16. There is no prior mention of an open tissue receiving section in claim 52 or in claim 71. Therefore, there is insufficient antecedent basis for this limitation in the claims. Upon rejection of claims 52 or 71, any claims depending from claims 52 and 71 are also rejected.

29. Claims 63 and 71 both recite the limitation "the elongated member" in lines 13 and 15. It is unclear if the elongated member referenced in either claim refers to the elongated probe member or the elongated tissue cutting member which both are previously disclosed in the claims. The claims are unclear and ambiguous therefore, the claims are rejected.

30. Claim 64 recites the limitation "the tissue receiving cannula" in line 17. There is no prior mention of a tissue receiving cannula in claim 64. Therefore, there is insufficient antecedent basis for this limitation in the claim.

31. Claim 65 recites the limitation "a drive housing" in line 11. It is unclear if the drive housing referenced in this claim refers to the drive housing previously disclosed in the claim or if the limitation intends to introduce a new drive housing, rendering the claim indefinite.

32. Claim 65 recites the limitation "the tissue receiving cannula" in line 12. There is no prior mention of a tissue receiving cannula in claim 65. Therefore, there is insufficient antecedent basis for this limitation in the claim.

33. Claim 65 recites the limitation "the tissue cutting surface" in line 17. There is no prior mention of a tissue cutting surface in claim 65. Therefore, there is insufficient antecedent basis for this limitation in the claim.

34. Claim 65 recites the limitation "a drive unit" in line 18. It is unclear if the drive housing referenced in this claim refers to the drive unit previously disclosed in the claim or if the limitation intends to introduce a new drive unit, rendering the claim indefinite.

35. Claim 69 recites the limitation "the distal tip" in lines 6 and 7. There is no prior mention of a distal tip in claim 69. Therefore, there is insufficient antecedent basis for this limitation in the claim.

36. Claim 69 recites the limitation "the elongated probe member" in lines 9 and 10. There is no prior mention of an elongated probe member in claim 69. Therefore, there is insufficient antecedent basis for this limitation in the claim.

37. Claim 76 recites the limitation "the opposed tissue cutting edges" in line 2. There is no prior mention of opposed tissue cutting edges in claim 76 or in any claim from which claim 76 depends. Therefore, there is insufficient antecedent basis for this limitation in the claim.

38. Claim 76 recites the limitation "the tissue cutting edges of the elongated tubular member" in lines 2 and 3. Prior to recitation of this limitation, claim 71, a claim from which claim 76 depends, refers to the elongated tubular member having one longitudinally oriented tissue cutting member. It is unclear if the elongated tubular member of the device is to have a plurality of tissue cutting edges or if the limitation intended to refer to the case of one cutting edge as well as a plurality of cutting edges, rendering the claim indefinite. Upon rejection of claim 76, any claim depending from claim 76 is also rejected.

39. Claim 79 recites the limitation "the second opening" in line 1. There is no mention of a second opening in claim 79 or in any claim from which claim 79 depends. Therefore, there is a lack of antecedent basis for this limitation in the claim.

40. Claims 86-95 recite the limitation "the biopsy device" in line 1. Prior mention of a biopsy device merely discloses an intended use of the elongated tissue cutting member disclosed and does not positively claim a biopsy device. Therefore, there is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

41. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

42. Claims 1, 7, 17-20, 22, 23, 27-29, 31-33, 35-45, 51-59, 63-65, 69, 71-74 and 83-87 are rejected under 35 U.S.C. 102(e) as being anticipated by Miller et al. (U.S. Patent Number 6,758,824).

In regard to claim 1, 7, 17-20, Miller et al. disclose a tissue biopsy device (10) for accessing and collecting a tissue specimen from a target site within a patient. The biopsy device comprises an elongated probe member (15), which has a proximal end configured to be secured to a drive and an inner lumen (27) extending along a longitudinal axis. Miller et al. describe the probe further having a penetrating distal tip (16) and an aperture (25) proximal to the penetrating distal tip configured to receive tissue from the target site. The Miller et al. device further includes an elongated tissue cutting member (17), which is disposed within the elongated probe member (15), which has at least one tissue cutting edge (35, 36). The at least one cutting edge has a longitudinal orientation at an angle with respect to the longitudinal axis less than 90 degrees (Fig. 5) and engages a tissue cutting edge (35) of the tissue cutting member.

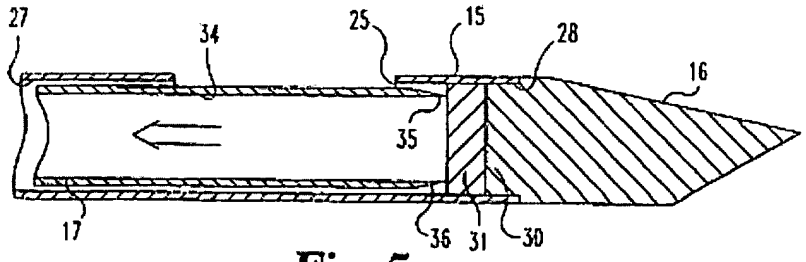

Fig. 5

The tissue cutting member (17) has an inner lumen (34), which is configured to be operably connected to at least one drive unit (22). The inner lumen (34) of the tissue cutting member (17) is further configured to access a vacuum source to transport a tissue specimen through the inner

lumen (34) to a tissue collector (55) in fluid communication with the inner lumen. The aperture (25) of the probe (15) has at least one longitudinally oriented tissue cutting edge, which engages a tissue cutting edge (35) of the beveled tip of the tissue cutting member (17). The tissue cutting edge (35) of the tissue cutting member (17) has a tissue cutting angle over a substantial part of its length with respect to the tissue cutting edge of the aperture of about 30 to about 75 degrees (col. 19, lines 15-47).

In regard to claims 22, 23, 27-29, 31-33, 35-45, 51-59, 63-65, 69, 71-74 and 83-87, Miller et al. disclose a tissue biopsy device for accessing and collecting a tissue specimen from a target site within a patient. The device disclosed by Miller et al. comprises a drive housing (70) which has a plurality of drive units, an outer member (75) which is releasably secured to the drive housing (70). The device has a proximal tubular portion (15) having an inner lumen (27) extending within the proximal tubular portion. The tubular portion (15) also has a tissue penetrating distal tip (16) and an open section (25) proximal to the tissue penetrating distal tip. Miller et al. disclose a supporting strut (30) extending from the penetrating distal tip to the proximal tubular portion (15) of the device. The apparatus disclosed by Miller et al. further comprises a tissue accessing cannula (43) which is slidably disposed at least in part within the inner lumen of the proximal tubular portion of the outer member at a coupler (46). The outer member defines an inner lumen (27), which has a tissue receiving aperture (25) spaced proximal to the distal end in fluid communication with the inner lumen of the accessing cannula (43). The tissue accessing cannula is operably secured to a drive unit (20) in the drive housing (70) to rotate the tissue receiving cannula (50). In addition, Miller et al. disclose an elongated tissue cutting member (17), which is formed at least in part of a tubular member, slidably disposed within the inner

lumen of the tissue accessing cannula (43). The tissue cutting member has a tissue cutting edge (35), which has an inner lumen (34) configured to receive a tissue specimen cut by the tissue cutting member. The tissue cutting member (17) is further connected to a drive unit (20) to move the tissue cutting member (17) within the inner lumen of the tissue accessing cannula. The cutting edge (35) of the device is parallel to a longitudinal axis of the tissue cutting member (17) and the tissue cutting member moves longitudinally in a reciprocating motion about the longitudinal axis (col. 8, lines 1-45). The reciprocating motor is capable of moving the tissue cutting member in a reciprocal longitudinal movement of between about 0.01 inch and about 0.2 inch. The tissue accessing cannula (43) has a distal end (28) seated against a proximal surface of the tissue penetrating distal tip (16) of the outer member. Miller et al. disclose the inner lumen of the tissue cutting member (17) is configured to access a vacuum source (150) to transport a cut tissue specimen to a tissue collection trap (55) in fluid communication with the inner lumen of the tissue cutting member. The aperture (25) of the probe (15) has at least one longitudinally distally oriented tissue cutting edge, which engages a tissue cutting edge (35) of the beveled needle-like tip of the tissue cutting member (17). The tissue cutting edge (35) of the tissue cutting member (17) has a tissue cutting angle over a substantial part of its length with respect to the tissue cutting edge of the aperture of about 30 to about 75 degrees (col. 19, lines 15-47). Miller et al. disclose the probe comprising an outer member (75) which has a proximal tubular portion (15) configured to be releasably secured to a drive housing (70) and an inner lumen (17) extending therein. A tissue penetrating distal tip (16) is disclosed by Miller et al. The device has an open section (25) proximal to the penetrating distal tip (16) and a supporting strut (30) extending from the penetrating distal tip to the proximal tubular portion (15). Miller et al.

disclose an elongated tissue cutting member (17) which is formed at least in part of a tubular member, slidably disposed within the inner lumen of the tissue accessing cannula (43). The tissue cutting member has a tissue cutting edge (35), which has an inner lumen (34) configured to receive a tissue specimen cut by the tissue cutting member. The tissue cutting member (17) is further connected to a drive unit (20) to move the tissue cutting member (17) within the inner lumen of the tissue accessing cannula. The cutting edge (35) of the device is parallel to a longitudinal axis of the tissue cutting member (17) and the tissue cutting member moves longitudinally in a reciprocating motion about the longitudinal axis (col. 8, lines 1-45). The reciprocating motor is capable of moving the tissue cutting member in a reciprocal longitudinal movement of between about 0.01 inch and about 0.2 inch. The tissue accessing cannula (43) has a distal end (28) seated against a proximal surface of the tissue penetrating distal tip (16) of the outer member. The tissue accessing cannula is operably secured to a drive unit (20) in the drive housing (70) to rotate the tissue receiving cannula (50). In addition, Miller et al. disclose an elongated tissue cutting member (17) which is formed at least in part of a tubular member, slidably disposed within the inner lumen of the tissue accessing cannula (43). The tissue cutting member has a tissue cutting edge (35), which has an inner lumen (34) configured to receive a tissue specimen cut by the tissue cutting member (17). The tissue cutting member (17) is rotatably disposed within the inner lumen of the tissue accessing cannula (34) with a longitudinal axis and a longitudinal tissue cutting edge oriented at an angle with respect to the longitudinal axis. Miller et al. further disclose the tissue cutting member having a non-cutting surface which defines a tissue receiving aperture along with the tissue cutting edge parallel to the tissue cutting member. The cutting edge of the tissue cutting member further includes a leading distal cutting

edge portion and an opposing trailing proximal cutting edge portion.

Claim Rejections - 35 USC § 103

43. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

44. Claims 2-6, 8-16, 21, 24-26, 28, 30 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (U.S Patent Number 6,758,824) in view of Ouchi (U.S Patent Number 6,514,215).

In regard to claims 2-6, 8-16, 21, 24-26, 28, 30 and 34, Miller et al. disclose the features of the Applicant's invention as described above. Miller et al. do not disclose a third concentrically disposed cannula with an arcuate wall section slidably disposed about the tissue cutting member. Ouchi discloses a tissue collecting instrument having a tissue cutting member disposed within a probe member (230) and a rotatable tissue accessing cannula (220) concentrically about the tissue cutting member (210). The tissue cutting member has an arcuate wall section. It would have been obvious to one having ordinary skill in the art at the time the Applicants' invention was made to modify a tissue biopsy device for accessing and collecting a tissue specimen from a target site, similar to that disclosed by Miller et al., to include a third concentrically disposed cannula and a tissue cutting member with an arcuate wall section, similar to that disclosed by Ouchi, to sever tissue from the target site and separate the severed tissue sample within the probe while maintaining the functionality of the device.

45. Claims 60-62, 75-82 and 88-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (U.S Patent Number 6,758,824) in view of Clement (U.S Patent Number 5,335,671).

In regard to claims 60-62, 75-82 and 88-95, Miller et al. disclose the features of the Applicant's invention as described above. Miller et al. do not disclose a longitudinally oriented slot in a wall of the tubular member having a distal end that opens to the tissue receiving opening in the distal tip of the device. Clement discloses a tissue removal assembly having a tissue cutting member which uses a moveable cutter cooperating with a cutting surface on a cannula positioned at a target site. The tissue removal assembly further includes longitudinally oriented slots on a wall of the tubular member to ensure constant fluid communication between the cannula passageway and the tubular member. It would have been obvious to one having ordinary skill in the art at the time the Applicants' invention was made to modify a tissue biopsy device for accessing and collecting a tissue specimen from a target site, similar to that disclosed by Miller et al., to include a slotted wall section of the tubular member, similar to that disclosed by Clement, to maintain the channels in fluid communication with one another for aspiration purposes.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fangemonique Smith whose telephone number is 571-272-8160. The examiner can normally be reached on Mon - Fri 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FS

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